LINOIS

December 30, 1974

Dear David:

I remember visiting Malloch and talking with him about Tetrasperma. I do not know if he worked with Dodge in New York as I did, but he looked at the problem in much the same way as Dodge did. Both of them were impressed by Tetrasperma. I did a little work on Tetrasperma at Dodge's insistance, but soon gave it up for crassa. All of Dodge's genetical work was done on sitophila, but I think my crassa cultures sporulated a little better so I chose it. Malloch and I never exchanged cultures either way.

I inbred the mutant Neurospora stocks, as you will see in my earlier papers, for ten or eleven gerarations. I never outcrossed it into other stocks so it was extremely homozygous and highly inbred.

In 1941 when we were at Washington Universitylin St. Louis. Beadle wrote requesting cultures. He said that he was interested in starting work on the sugject. I sent him the cultures marked for the genes in the first chromosome, pale, gap, crisp + and -. Although I had started working on yeast, Jerry still maintained the Neurospora stock and had done a few crosses. We had just finished spending a year with Lew Stadler demonstrating the use of microconidia in U. V. and X-ray mutation experiments.

The Neurospora stocks were, as I said, highly inbred and gave no evidence of high, second-division segregation of sites of affinity, although a German worker studying, I think, smuts found 90 percent sacdnd division segregation in smut and I think his name was Bauch.

The Saccharomyces stock that we use was produced from a highly cross bred cultures; sites of affinity abound in this stock. I suggest you look for second division segregation not due to crossing over in your cultures. I made some earlier studies of hybrids between sitophila and crassa as well as between sitophila and tetrasperma with the most unusual results. I could not understand them. I think pertinent to my current interest in sites that this would be an interesting field.

With warm regards

Carl C. Lindegren

Caltures in 1940 0 1939